

# Utilization of Glucagon-Like Peptide-1 Receptor Agonists in Canada

Chris Vannabouathong, Kim Le, Peter Dyrda; CADTH, Toronto, Ontario

### Background

- In Canada, glucagon-like peptide-1 (GLP-1) receptor agonists (RAs) are only publicly reimbursed for patients with type 2 diabetes mellitus (T2DM). Access to GLP-1 RAs differs across public drug plans depending on the listing status (i.e., general benefit versus special authorization) and reimbursement criteria (e.g., first-line monotherapy use if a patient is intolerant to metformin).
- Canadian expenditures on GLP-1 RAs increased significantly in recent years, correlating with regulatory approvals and direct-to-consumer advertising. This may also be explained by the use of these drugs "off reimbursement criteria."

### Objective

To analyze the use patterns of GLP-1 RAs in Canada, including market share, drug expenditures, and prior and concurrent use of other T2DM drugs, and estimate their suspected use off reimbursement criteria.

#### Methods

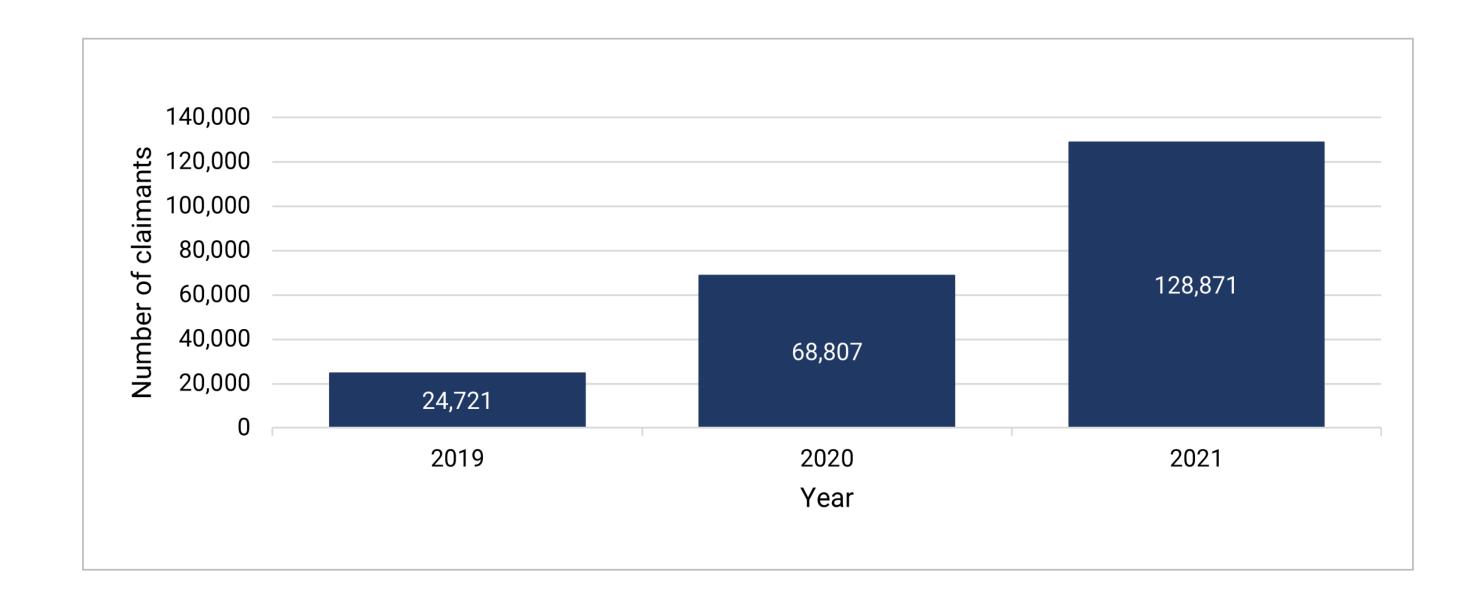
- Retrospective analysis of administrative claims (National Prescription Drug Utilization Information System, January 1, 2014, to December 21, 2020)
- GLP-1 RA monotherapy versus combination therapy (with other T2DM drugs) usage and their suspected use off reimbursement criteria (non-T2DM), defined as GLP-1 RA use without a history of other T2DM drugs or glucose monitoring devices

#### Results

• Ozempic is the dominant GLP-1 RA (> 99% market share; Figure 1) and its expenditures (Figure 2) have increased from \$13.5 million to \$227 million from 2019 to 2021 (the number of Ozempic claimants increased 5-fold from 24,721 to 128,871 in this same period).

- The increasing use of Ozempic can be partially attributed to suspected non-T2DM claims. The proportion of claimants representing suspected non-T2DM use increased by more than double from 4.2% in 2019 to 10.7% in 2021 (Figure 3).
- Some patients may not be using Ozempic appropriately for T2DM, including a portion of the 17% using it as monotherapy and the 12% using it in combination with dipeptidyl peptidase-4 inhibitors in 2021.

### Figure 1: Number of Ozempic Claimants Across Provincial and Territorial Formulary Drug Claims in Canada



## Figure 2: National Public Drug Plan Expenditures on Ozempic by Year From 2019 to 2021

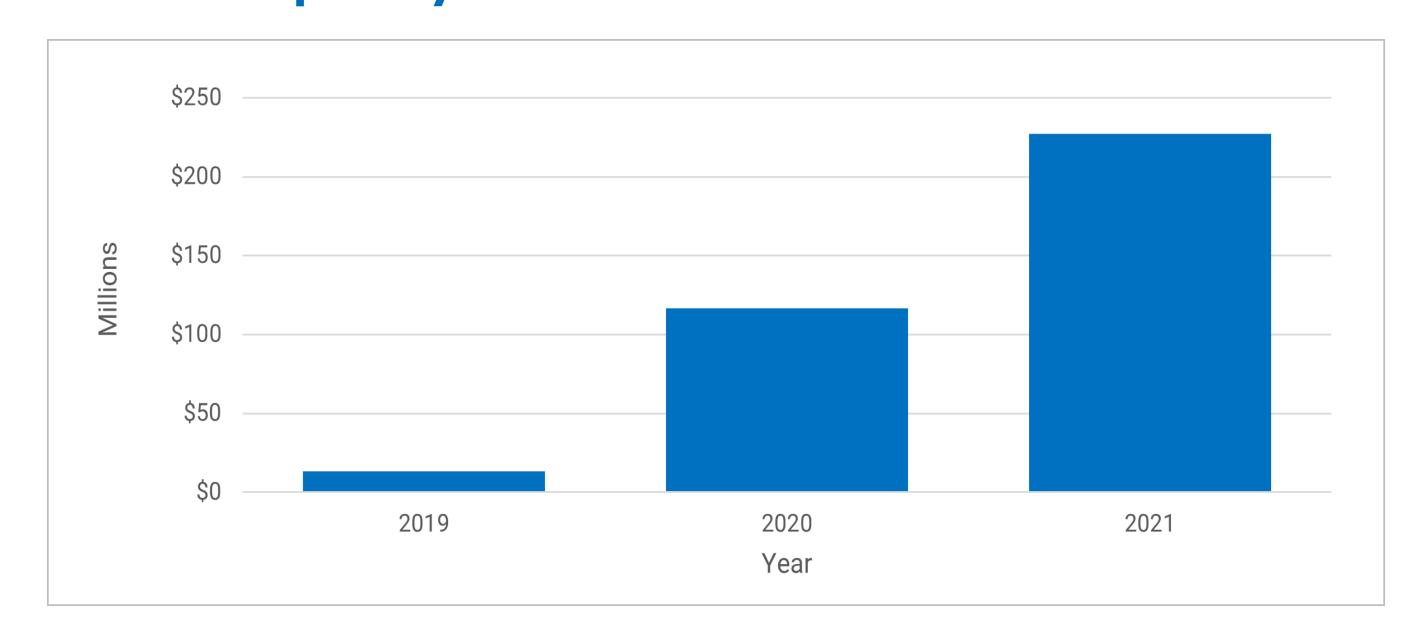
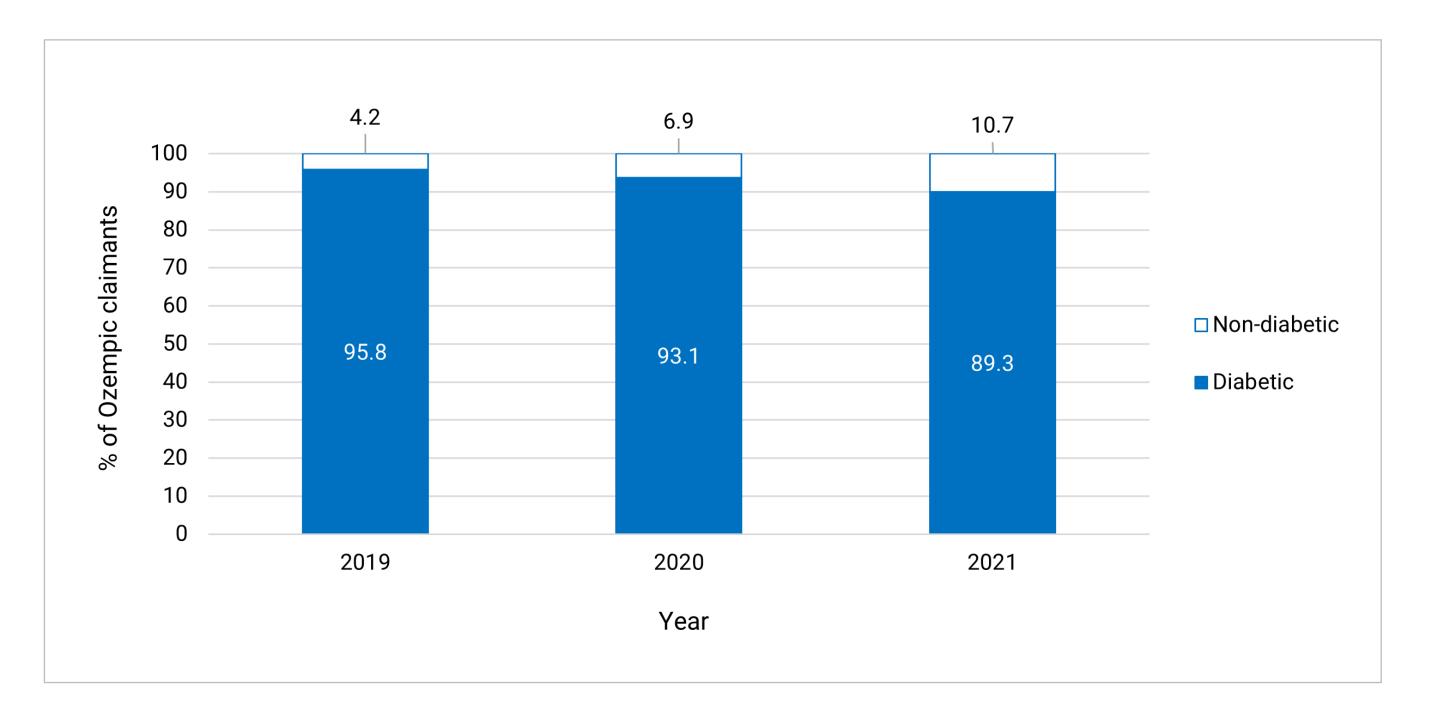


Figure 3: Suspected Non-Diabetic Use of Ozempic Based on Prior Claims History (Percentage of Ozempic Claimants)



#### Conclusions

Formulary management strategies (prior authorization or prescriber audits) can promote the appropriate use of GLP-1 RAs. Future research in this field should assess if similar patterns are seen with private insurance, if non-T2DM GLP-1 RA use can be detected for individuals circumventing current funding criteria, and the effects of direct-to-consumer advertising on appropriate drug use.

# Read full report here:

